

Patent Claims

1. Circuit arrangement for digital television reception in motor vehicles with a network (10), to which at least one operating unit (30), at least one display (20) and at least one digital television reception unit (50) are connected, and with a memory device (58) and a control device (57) for the storage and management of miscellaneous data contained in the digital received signal along with the video and audio signals and made available by a demultiplexer device (52) contained in the digital television reception unit (50),
characterised in that the memory device (58) and the control device (57) form a server unit (59) and are coupled via the network (10) to the at least one control unit (30) and the at least one display (20), that the control device (57) is electrically connected to the demultiplexer device (52) within the digital television reception unit (50), and that the audio and video signals and the miscellaneous data can be supplied to the network (10) by the control device (57) as recalled from the memory device (58).
2. Circuit arrangement according to Claim 1,
characterised in that the network (10) is a MOST network.
3. Circuit arrangement according to one of the Claims 1 or 2,
characterised in that an interface (55) is provided, via which the audio and video signals and the miscellaneous data are coupled to the network (10).
4. Circuit arrangement according to one of the Claims 1 to 3,
characterised in that the data saved in the memory device (58) is supplied asynchronously to the network (10).
5. Circuit arrangement according to one of the Claims 1 to 4,
characterised in that the control device (57) is connected via a control bus (79) to the network (10).
6. Circuit arrangement according to one of the Claims 1 to 5,

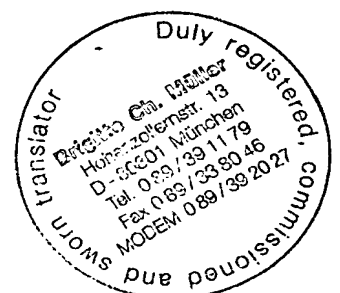


characterised in that the content and the organisation of the data saved in the memory device (58) can be influenced by the control device (57).

7. Circuit arrangement according to Claim 6,
characterised in that the content of the memory device (58) is determined by the criteria specified in the control device (57).
8. Circuit arrangement according to one of the Claims 1 to 7,
characterised in that data can be cyclically written to the memory device (58) by the control device (57).
9. Circuit arrangement according to one of the Claims 1 to 8,
characterised in that the data made available from the received miscellaneous data in the memory device (58) and to be written to the memory device (58) can be specifically selected by the control device (57).
10. Circuit arrangement according to one of the Claims 1 to 9,
characterised in that the miscellaneous data to be written to the memory device (58) is programme data of the television programme being currently received.
11. Circuit arrangement according to one of the Claims 1 to 10,
characterised in that the miscellaneous data which can be saved in the memory device (58) is EPG, MHP or similar data.
12. Circuit arrangement according to one of the Claims 1 to 11,
characterised in that the data saved in the memory device (58) is subjected to plausibility and / or completeness tests by the control device (57) and if required, erroneous data is substituted and / or missing data is supplemented in that the demultiplexer device (52) is initiated into making the corresponding data available.
13. Circuit arrangement according to one of the Claims 1 to 12,
characterised in that a radio telephone (70) is coupled to the network (10).



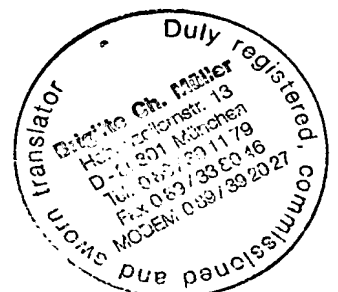
14. Method for the reception of digital television signals in a mobile television reception system with a network (10), to which at least one operating unit (30), a display (20) and a digital television reception unit (50) with a DVB-T receiver device (51) and a following demultiplexer device (52) are connected, and on which audio, video and miscellaneous data can be accessed,
characterised in that the audio and video data can be processed independently of the miscellaneous data, in that the video and audio data made available by the demultiplexer device (52) can be transferred directly over the network (10) to the operating unit (30) and / or display (20) and the miscellaneous data, separate from this, can be supplied organised to the operating unit (30) and / or display (20) via the control device arranged in the digital reception unit (50).
15. Digital television reception unit (50) in a mobile digital television reception system, in which the television reception unit (50) is connected to at least one operating unit (30) and at least one display (20) via a network (10), comprising
- a large number of digital television reception modules (51) for the reception of several data streams, which contain coded and compressed digital television signals,
- a demultiplexer device (52) for separating video and audio signals as well as miscellaneous data from the data streams of the received digital television signals,
- an evaluation device (56) for the evaluation of the content of the miscellaneous data,
- a memory device (58) for saving the miscellaneous data according to specified criteria,
- a control device (57) for sorting and managing the saved miscellaneous data, wherein the control device (57) is connected to at least one of a large number of television modules; and



a network interface (55) for injecting audio and video signals into the network (10), wherein the network interface is connected to the control device (57) for the reception of request signals for calling the saved miscellaneous data.

16. Digital television reception unit according to Claim 15, wherein the miscellaneous data is programme data relating to programmes other than the programme being currently received.
17. Digital television reception unit according to Claim 15 or 16, wherein a television receiving module (51) processes miscellaneous data in background operation under the control of the control device (57), while another television receiving module (51) processes the video and audio signals of the programme being currently received.
18. Digital television reception unit according to one of the Claims 15 to 17, wherein the connection between the control device (57) and the network interface (55) is formed as a bi-directional line bus, via which data saved in a controlled manner by any operating unit can be specifically injected into the network.
19. Digital television reception unit according to one of the Claims 15 to 18, wherein the control device (57) and the memory device (58) are formed as a server (59), which makes the miscellaneous data available to the displays (20) connected to the network (10).
20. Digital television reception unit according to one of the Claims 15 to 19, wherein the network is a ring-shaped MOST network in a motor vehicle.
21. Method of receiving digital television signals in a mobile digital television reception system with a digital television reception unit, which is connected via a network to at least one operating device and at least one display, comprising the following steps:

reception of a large number of digital data streams, which contain coded and compressed television signals;



separation of audio and video signals as well as miscellaneous data from the received data streams;

evaluation of the content of the miscellaneous data;

saving of the miscellaneous data according to specified criteria;

sorting and managing the saved miscellaneous data;

injection of audio and video signals into the network and reception of request signals for calling the saved miscellaneous data.

22. Method according to Claim 21, wherein the audio and video signals are injected into the network in real time, whereas the evaluation, saving and calling of the miscellaneous data does not occur in real time.

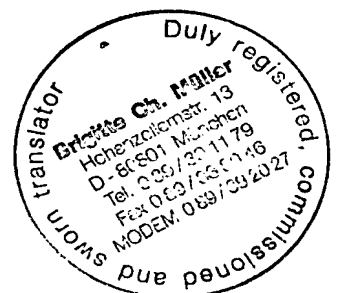


Fig. 1:

- 20 Display
- 30 MMI
- 50 Digital receiver
- 70 Telephone

